L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:6843 CAPLUS
DN 104:6843
ED Entered STN: 11 Jan 1986
TI Fogging-resistant transparent articles
IN Matsuzaki, Yasuo
PA Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08J007-06
ICS B29C071-04; C08J007-12
CC 38-3 (Plastics Fabrication and Uses)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 60141727	A2	19850726	JP 1983-248985	19831228 <--
PRAI JP 1983-248985		19831228		

AB Fogging-resistant transparent articles are prepared by treating plastic articles with plasma at low temperature, saponifying with a strong alkali solution, and coating with a surfactant. Thus, a 0.6-mm poly(ethylene terephthalate) [25038-59-9] transparent film was plasma-treated in an Ar-N atmospheric for 1 min, immersed in 1% NaOH aqueous solution for 2 h and in 5% aqueous solution of Quartamin P (cationic surfactant) for 1 h, and dried.
ST polyethylene terephthalate film fogging resistance; plasma treatment polyethylene terephthalate film; surfactant treatment polyethylene terephthalate film; sodium hydroxide treatment polyester film
IT Antifogging agents
(cationic surfactants, for plastic films treated with plasma and alkali solution)
IT Polycarbonates
RL: USES (Uses)
(films, plasma-, alkali aqueous solution- and cationic surfactant-treated, transparent, fogging-resistant)
IT Plastics, film
RL: USES (Uses)
(plasma-, alkali aqueous solution- and cationic surfactant-treated, transparent, fogging-resistant)
IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(surfactants, plastic films treated with, transparent, fogging-resistant)
IT Plasma, chemical and physical effects
(treatment by, of plastic films, for improved fogging resistance)
IT Surfactants
(cationic, antifogging agents, for plastic films treated with plasma and alkali solution)
IT 1310-58-3, uses and miscellaneous 1310-73-2, uses and miscellaneous
RL: USES (Uses)
(aqueous solution, plastic films treated with, transparent, fogging-resistant)
IT 24937-78-8 25038-54-4, uses and miscellaneous 25038-59-9, uses and miscellaneous
RL: USES (Uses)
(films, plasma-, alkali aqueous solution- and cationic surfactant-treated, transparent, fogging-resistant)
IT 56-81-5, uses and miscellaneous
RL: USES (Uses)
(sodium hydroxide aqueous solution containing, plastic films treated with, transparent, fogging-resistant)
RN 1310-58-3

RN 1310-73-2
RN 24937-78-8
RN 25038-54-4
RN 25038-59-9
RN 56-81-5

L8 ANSWER 2 OF 3 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
AN 1986-037824 [06] WPIDS
DNC C1986-015845
TI Clouding-resistant transparent plastics preparation - by low temperature plasma treating plastic surface, saponifying with strong alkaline solution and coating with surfactant.
DC A35
PA (MATS-I) MATSUZAKI Y
CYC 1
PI JP 60141727 A 19850726 (198606)* 4p <--
ADT JP 60141727 A JP 1983-248985 19831228
PRAI JP 1983-248985 19831228
IC B29C071-04; C08J007-06
AB JP 60141727 A UPAB: 19930922
The surface of a transparent plastic is first low temperature-plasma treated, and then saponified with strong alkaline solution and then coated with surfactant. Transparent plastics are pref. polyesters, polycarbonates, polyamides, polyacrylates, polymethacrylates, polyolefins and polyvinyl chlorides. Examples of strong alkaline solns. are alkali metal or alkaline earth metal oxide or hydroxide such as NaOH, KOH, LiOH, calcium hydroxide or barium hydroxide, or their mixts. The surfactant is pref. a nonionic fluorine-containing surfactant.
USE/ADVANTAGE - Surface hardness, transparency and cloud-resistance are good. Used as eye glasses, mirrors, etc..
In an example, a transparent polyester film (polyethylene terephthalate, 0.6mm thick) was plasma-treated for 1 minute. This was dipped in 1% -NaOH solution at 50 deg.C for 2 hours, and after washing with water and drying, dipped in a 5% -Coatamine aqueous solution (cationic surfactant) at 50 deg.C for 1 hour and then dried with air.
0/1
FS CPI
FA AB
MC CPI: A08-S08; A09-A02; A10-E09; A11-C04B2; A11-C04E; A12-L03

L8 ANSWER 3 OF 3 JAPIO (C) 2004 JPO on STN
AN 1985-141727 JAPIO
TI MANUFACTURE OF ANTIFOGGING TRANSPARENT PRODUCT
IN MATSUZAKI YASUO
PA MATSUZAKI YASUO
PI **JP 60141727** A 19850726 Showa
AI JP 1983-248985 (JP58248985 Showa) 19831228
PRAI JP 1983-248985 19831228
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1985
IC ICM C08J007-06
ICS B29C071-04; C08J007-12
AB PURPOSE: To obtain a transparent product provided with high antifogging potential without impairing its inherent characteristics, by performing low-temperature plasma treatment of the surface of a plastic followed by saponification of the surface with a strong alkali and furthermore, coating on it a surfactant.
CONSTITUTION: The surface of a transparent plastic is subjested to low-temperature plasma treatment followed by saponification of the resulting with a strong alkaline solution and furthermore, coating on it a surfactant, thus obtaining the objective product. Said plastic is e.g. of polyester, polycarbonate, polyamide, polyolefin. The alkaline solution is pref. a 0.1∼5% aqueous solution of combination of NaOH and KOH with the molar ratio 1/1∼9/1. A nonionic fluorine-based surfactant is pref. used.